

Title (en)
SEMICONDUCTOR STRUCTURE AND METHOD FOR MANUFACTURING SEMICONDUCTOR STRUCTURE

Title (de)
HALBLEITERSTRUKTUR UND VERFAHREN ZUR HERSTELLUNG EINER HALBLEITERSTRUKTUR

Title (fr)
STRUCTURE SEMI-CONDUCTRICE ET PROCÉDÉ DE FABRICATION DE STRUCTURE SEMI-CONDUCTRICE

Publication
EP 4181187 A4 20240529 (EN)

Application
EP 21947876 A 20210909

Priority
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• CN 2021117523 W 20210909

Abstract (en)
[origin: US11488917B1] The present disclosure provides a semiconductor structure and a manufacturing method thereof. The semiconductor structure includes a first chip and a second chip. A first conductive connection wire of the first chip is connected to a first conductive contact pad, and a second conductive connection wire of the second chip is connected to a second conductive contact pad. In addition, the first conductive contact pad includes a first conductor and a second conductor, and the second conductive contact pad includes a third conductor and a fourth conductor. The first conductor is directly opposite to the fourth conductor, and the second conductor is directly opposite to the third conductor. Therefore, pre-connection of the first conductive contact pad and the second conductive contact pad may be implemented and then the first chip and second chip that are pre-connected are transferred for bonding.

IPC 8 full level
H01L 23/48 (2006.01)

CPC (source: EP KR US)
H01L 21/60 (2021.08 - EP KR); **H01L 23/48** (2013.01 - EP); **H01L 23/488** (2013.01 - EP KR); **H01L 24/05** (2013.01 - EP KR US); **H01L 24/08** (2013.01 - EP KR US); **H01L 24/80** (2013.01 - EP KR US); **H01L 2224/05541** (2013.01 - US); **H01L 2224/05552** (2013.01 - EP KR); **H01L 2224/05576** (2013.01 - EP KR); **H01L 2224/05647** (2013.01 - US); **H01L 2224/05684** (2013.01 - US); **H01L 2224/0807** (2013.01 - EP KR); **H01L 2224/08145** (2013.01 - EP KR); **H01L 2224/08146** (2013.01 - US); **H01L 2224/08503** (2013.01 - EP KR); **H01L 2224/8012** (2013.01 - US); **H01L 2224/8081** (2013.01 - EP KR); **H01L 2224/80815** (2013.01 - EP KR); **H01L 2224/80895** (2013.01 - EP KR); **H01L 2224/80896** (2013.01 - EP KR); **H01L 2924/3512** (2013.01 - US); **H01L 2924/37001** (2013.01 - US)

C-Set (source: EP)
1. **H01L 2224/04 + H01L 2224/08**
2. **H01L 2224/05552 + H01L 2924/00012**

Citation (search report)
• [XA] US 2019109042 A1 20190411 - KATKAR RAJESH [US], et al
• [A] US 2014117546 A1 20140501 - LIU PING-YIN [TW], et al
• [A] US 2018269172 A1 20180920 - KATKAR RAJESH [US], et al
• See also references of WO 2023272943A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

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DOCDB simple family (application)
US 202217648313 A 20220119; EP 21947876 A 20210909; JP 2023533661 A 20210909; KR 20237017260 A 20210909